

1 MICHAEL A. JACOBS (CA SBN 111664)
2 MJacobs@mofo.com
3 ARTURO J. GONZÁLEZ (CA SBN 121490)
AGonzalez@mofo.com
4 425 Market Street
San Francisco, California 94105-2482
Telephone: 415.268.7000
Facsimile: 415.268.7522
5
6 KAREN L. DUNN (*Pro Hac Vice*)
kdunn@bsfllp.com
7 HAMISH P.M. HUME (*Pro Hac Vice*)
hhume@bsfllp.com
BOIES SCHILLER FLEXNER LLP
8 1401 New York Avenue, N.W.
Washington DC 20005
Telephone: 202.237.2727
Facsimile: 202.237.6131
9
10 WILLIAM CARMODY (*Pro Hac Vice*)
bcarmody@susmangodfrey.com
11 SHAWN RABIN (*Pro Hac Vice*)
srabin@SusmanGodfrey.com
12 SUSMAN GODFREY LLP
13 1301 Avenue of the Americas, 32nd Floor
New York, NY 10019-6023
14
15 Attorneys for Defendants
UBER TECHNOLOGIES, INC.
and OTTOMOTTO LLC
16
17
18
19

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

20 WAYMO LLC,
21 Plaintiff,
22 v.
23 UBER TECHNOLOGIES, INC.,
OTTOMOTTO LLC; OTTO TRUCKING LLC,
24 Defendant.

Case No. 3:17-cv-00939-WHA

**DEFENDANTS UBER
TECHNOLOGIES, INC. AND
OTTOMOTTO, LLC'S MOTION FOR
SUMMARY JUDGMENT, MOTION
TO STRIKE TS 96, AND DAUBERT
MOTION**

Date: September 20, 2017
Time: 8:00 a.m.
Courtroom: 8, 19th Floor
Judge: The Honorable William Alsup
Trial Date: October 10, 2017

25
26
27 **UNREDACTED VERSION OF DOCUMENT SOUGHT TO BE SEALED**
28

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	ARGUMENT	2
	A. Summary Judgment Should Be Granted on TS 96	2
	1. Uber does not use TS 96 as defined in Waymo's 2019.210 Statement.....	2
	2. Waymo should not be allowed to assert general diode positioning and beam spacing concepts through TS 96.....	6
	B. TS 96 Should Be Stricken	8
	1. TS 96 is not a properly identified trade secret	8
	2. The sufficiency of Waymo's TS 96 identification is a question for the Court, not the jury	10
	C. Dr. Hesselink's Opinion on TS 96 Should Be Excluded	10
	1. Dr. Hesselink disregards the possibility that any similarity between GBr3 and Fuji arises from general principles of optics	11
	2. Dr. Hesselink's comparison of the GBr3 curve and the Fuji curve, rather than actual diode positions, is methodologically unsound	13
III.	CONCLUSION	14

1 **TABLE OF AUTHORITIES**

	Page(s)
2 Cases	
4 <i>Agency Solutions.Com, LLC v. Trizetto Grp. Inc.</i> , 5 819 F. Supp. 2d 1001 (E.D. Cal. 2011).....	10
6 <i>Fortinet, Inc. v. Sophos, Inc.</i> , 7 No. 13-cv-05831-EMC, 2015 WL 5971585 (N.D. Cal. Oct. 15, 2015)	10
8 <i>Fortinet, Inc. v. Sophos, Inc.</i> , 9 No. C 13-5831 EMC (N.D. Cal. Dec. 16, 2014), Dkt. 110.....	10
10 <i>Imax Corp. v. Cinema Techs., Inc.</i> , 11 152 F.3d 1161 (9th Cir. 1998).....	8
12 <i>Lilith Games (Shanghai) Co. v. uCool, Inc.</i> , 13 No. 15-CV-01267-SC, 2015 WL 4149066 (N.D. Cal. July 9, 2015).....	10
14 <i>Metabyte, Inc. v. Canal+Techs.</i> , 15 S.A., No. C-02-05509 RMW, 2005 WL 6032845 (N.D. Cal. June 17, 2005).....	11
16 <i>Princess Cruises, Inc. v. Amrigan Enters., Inc.</i> , 17 51 F. App'x. 626 (9th Cir. 2002)	8
18 <i>U.S. v. Rincon</i> , 19 28 F.3d 921 (9th Cir. 1994).....	14
20 <i>VasoNova Inc. v. Grunwald</i> , 21 No. C 12-02422 WHA, 2012 WL 4119970 (N.D. Cal. Sept. 18, 2012).....	9
22	
23	
24	
25	
26	
27	
28	

1 **I. INTRODUCTION**

2 Waymo began this case with broad accusations about the alleged theft of 14,000 files. But
 3 as the Court has now seen, Waymo is reduced to peddling rumors and innuendo about a
 4 conspiracy, while ignoring the undisputed differences between its LiDAR and Uber's design:

5 THE COURT: [Y]ou painted this as a gigantic conspiracy. Well,
 6 we come to find out [REDACTED]
 7 [REDACTED]
 8 [REDACTED]
 9

10 (9/6/17 Sealed Hr'g Tr. at 77:17-25.) Because of these fundamental differences between Uber's
 11 and Waymo's designs, TS 96 should not go to the jury. Waymo presents no evidence that the
 12 GBr3 [REDACTED] files were in Uber's possession or were used by anyone to design the Fuji boards.
 13 The undisputed differences in the GBr3 and Fuji boards affirm that no such misappropriation
 14 occurred. The analysis of Waymo's own expert, Dr. Hesselink, confirms that Uber does not use
 15 the specific implementation of Waymo's GBr3 [REDACTED]. Dr. Hesselink's calculations and
 16 illustrations show that the diode positioning does not match up, even when the differing focal
 17 lengths are factored out. Dr. Hesselink also acknowledges that the diode positioning is driven by
 18 the beam spacing, which he admits is completely different. Accordingly, summary judgment in
 19 favor of Uber on TS 96 is appropriate.

20 In addition, Waymo's repeated reframing of the scope of TS 96 confirms that it is not
 21 properly identified. As explained in Uber's prior briefing, Waymo's description of the "design
 22 schematics and layouts" in the TS 96 files does not properly identify specific alleged trade secret
 23 information from the hundreds of components and parameters in those files. Furthermore,
 24 Waymo is not even asserting misappropriation of the specific parameters in the files, but focusing
 25 instead on a general diode positioning concept that Waymo argues is "reflected" in the TS 96
 26 files. (9/6/17 Sealed Hr'g Tr. at 54:18-55:24.) Having defined TS 96 as a specific
 27 implementation of a specific board, Waymo should not be allowed now to backdoor a general
 28

1 diode positioning concept that is not spelled out in TS 96 and is found only in other alleged trade
 2 secrets that Waymo has waived.

3 Finally, Dr. Hesselink's analysis for comparing Waymo's GBr3 [REDACTED] and Uber's Fuji
 4 [REDACTED] is methodologically unsound, and should be excluded under the Court's gatekeeping
 5 function.

6 **II. ARGUMENT**

7 **A. Summary Judgment Should Be Granted on TS 96**

8 **1. Uber does not use TS 96 as defined in Waymo's 2019.210 Statement**

9 Uber does not use the specific implementation of Waymo's [REDACTED] claimed by
 10 Waymo in TS 96. Waymo's 2019.210 Statement identifies TS 96 as covering specific "design
 11 [REDACTED] schematics and layouts":

12 [REDACTED]
 13 [REDACTED]
 14 [REDACTED]
 15 [REDACTED]
 16 [REDACTED]
 17 [REDACTED]
 18 [REDACTED]
 19 [REDACTED]
 20 [REDACTED]
 21 [REDACTED]
 22 [REDACTED]

23 (Dkt. 25-7 at 55.) As the Court has noted, "Waymo insists that asserted trade secret number 96
 24 was adequately disclosed because it remains 'directed to *specific implementations* of Waymo's
 25 trade secret LiDAR designs' as opposed to general concepts." (9/6/17 Order, Dkt. 1485 at 1
 26 (quoting Waymo Opp'n, Dkt. 1160 at 6 (emphasis in original).) To escape Defendants' motion to
 27 strike, Waymo has repeatedly insisted that TS 96 is limited to a single schematic:

28

1 We disclosed a specific schematic. This one PCB. Okay? Out of
 2 14,000 files, we narrowed it to this one schematic. (8/23/17 Public
 Hr'g Tr. at 24:11-12.)

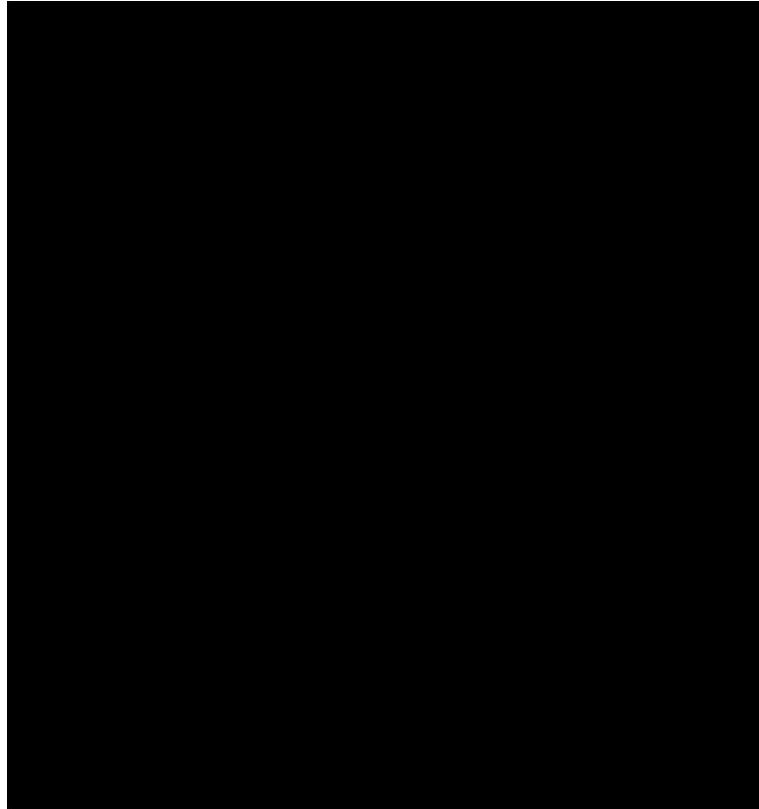
3 TS 96 claims one specific PCB that includes [REDACTED]
 4 Waymo's trade secret list
 (served before discovery began) identified this exact PCB
 5 schematic, and identified for Defendants that one unique aspect of
 the schematic reflected [REDACTED]
 6 Dkt. 25-7 at 55. There can be little debate that the
 7 [REDACTED] as implemented by Waymo is
 identified in TS 96 for purposes of Section 2019. (Waymo Resp. to
 Suppl. Br., Dkt. 1449-4 at 4 (emphasis added).)

8 (See also 8/23/17 Sealed Hr'g Tr. at 47:8-10 (“We hear you. So what we’re going to do is we’re
 9 going to talk about our specific implementation of this design.”).) As the Court observed during
 10 inspection of the files in question, the layouts claimed by Waymo comprise “every single box,
 11 circle, and line on that thing is the layout – selection and layout, and the required manufacturer.”
 12 (8/23/17 Public Hr'g Tr. 28:8-12.) But Waymo does not point to Uber’s use of any specific
 13 layout, diode position, angle, or any other specification from the GBr3 [REDACTED] Instead,
 14 Waymo’s expert, Dr. Hesselink, says only that the laser diodes [REDACTED]
 15 [REDACTED] (Chang Decl. Ex. 1, Hesselink Rpt. ¶ 432.)

16 Even according to Waymo’s own expert, Uber did not use Waymo’s specific
 17 implementation for TS 96. As purported “objective evidence of the similarity” between Waymo
 18 and Uber’s designs, Dr. Hesselink plotted the laser diode positions for Waymo’s GBr3 [REDACTED]
 19 and Uber’s Fuji [REDACTED] on separate curves and overlaid them (after scaling) for comparison.
 20 (Dkt. 1357-3 at 24.) Even assuming that Dr. Hesselink’s method of scaling the Fuji curve was
 21 methodologically sound (it is not), the laser diode positions do not match. (*Id.* (overlay below).)

22
 23
 24
 25
 26
 27
 28

1
2
3
4
5
6
7
8
9
10
11
12
13

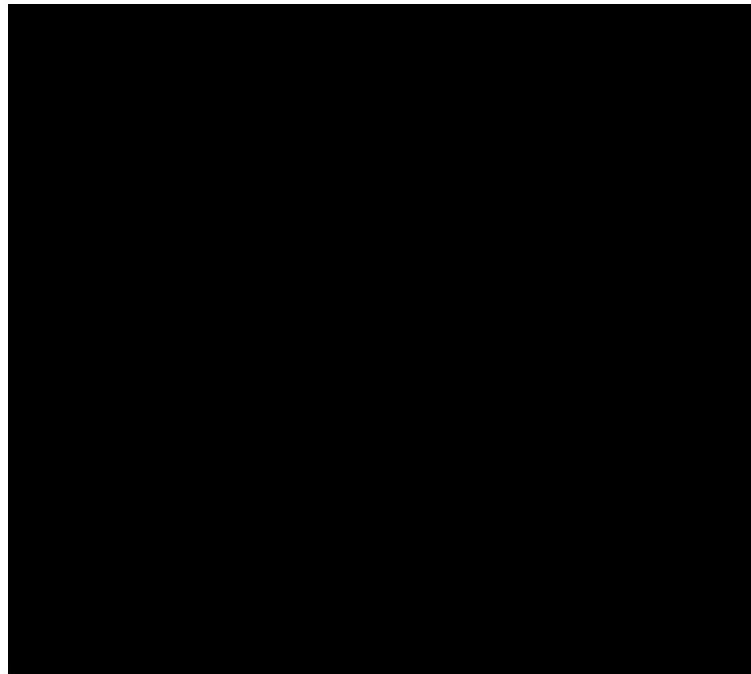


Waymo cannot dispute that, when comparing the actual delta Y of the diodes, Fuji's diodes at the bottom of [REDACTED] are spaced [REDACTED] farther apart than GBr3's, while its other diodes are spaced between [REDACTED] farther apart than GBr3's, demonstrating that the Fuji board is not a scaled-up copy of the GBr3 board as Waymo had suggested. (Uber Suppl. Br., Dkt. 1399-4 at 4-5 (containing chart).)

Dr. Hesselink's second attempt in Waymo's September 5 submission, where he provided a new analysis that was not in his expert report (and therefore should not even be considered), fares no better. In an effort to make the diode positions appear similar, Dr. Hesselink adjusts the curves of the GBr3 and Fuji diodes to remove the effect of the different focal lengths (as explained below in Section B, this is an improper adjustment). Notwithstanding Dr. Hesselink's adjustments, the illustration still clearly shows that the diode positions *do not match*. (*Id.* at 11.)

24
25
26
27
28

1
2
3
4
5
6
7
8
9
10
11



12 That the diode positions do not match is unsurprising. Dr. Hesselink acknowledges that
13 diode positions on the boards are directly driven by the elevation angles chosen for the laser
14 beams. (Hesselink Decl., Dkt. 1456-3 at ¶ 10 ([REDACTED]
15 [REDACTED]). Dr. Hesselink admits the elevation angles in Fuji are completely
16 different from the angles in GBr3. (*See id.*, ¶¶ 30-31; *see also* Chang Decl. Ex. 1, Hesselink Rpt.
17 ¶ 433.) He also admits that GBr3 and Fuji are designed to see different vertical fields of view:
18 the vertical field of view “spans from -22 degrees to approximately +8 degrees for Fuji but spans
19 only [REDACTED].” (Hesselink Decl. at 20.) The differing elevation
20 angles of GBr3 and Fuji are depicted below (comparing the full 64 beams on the left; comparing
21 just the [REDACTED] beams on the right):

22
23
24
25
26
27
28

1 As can be seen, the GBr3 and Fuji beam spacing patterns are very different in terms of fields of
 2 view, elevation angles of the beams, density of the beam spacing, and interrogation points of the
 3 beams on the roadway. Dr. Hesselink's own comparison shows that the GBr3 and Fuji designs
 4 do not result in the same roadway interrogation points. (*Id.* at 16-17.) [REDACTED]

5 [REDACTED], and only [REDACTED].”

6 (*Id.* at 14.) The undisputed differences in the beam spacing patterns necessarily mean that the
 7 diode positioning will be different, as evidenced by the differences reflected in Dr. Hesselink's
 8 analysis.

9 In addition, Uber has pointed out many other differences between the GBr3 [REDACTED] and
 10 Fuji [REDACTED] that Waymo cannot dispute (e.g., [REDACTED]
 11 [REDACTED]
 12 [REDACTED]). (Dkt. 1461-3 at 4.) Between Dr. Hesselink's admissions and these
 13 unchallengeable differences, there can be no genuine dispute that Uber does not use Waymo's
 14 GBr3 [REDACTED] implementation.

15 **2. Waymo should not be allowed to assert general diode positioning and
 16 beam spacing concepts through TS 96**

17 Waymo should not be allowed to manufacture a dispute about TS 96 by alleging
 18 misappropriation of Waymo's general diode positioning and beam spacing strategy, which is not
 19 a trade secret that Waymo chose to assert. This attempted misdirection is clear in Waymo's Offer
 20 of Proof, where Waymo contends that it spent years to figure out that [REDACTED]
 21 [REDACTED]
 22 [REDACTED] which was “reflected” in GBr3 [REDACTED]. (Offer of Proof, Dkt.
 23 1357-3 at 18.) Recognizing that Dr. Hesselink's own overlay of “scaled” GBr3 and Fuji curves
 24 indisputably show that the actual diode positions do not match, Waymo now argues instead that
 25 “[t]his overlay shows a strikingly similar positioning of the individual diodes . . . as well as the
 26 same [REDACTED] provided by Anthony
 27 Levandowski to Uber/Otto.” (*Id.* at 24-25 (emphasis added).) In a transparent attempt to shift
 28 the Court's attention back to their “gigantic conspiracy” about Anthony Levandowski, Waymo

1 tries to resurrect its alleged “[REDACTED]” concept, despite Waymo’s decision
 2 not to include TS 1 (covering [REDACTED]) in its narrowed list of trade secrets
 3 for trial. (*Id.* at 25.)

4 Tellingly, Waymo’s Offer of Proof cites communications purportedly showing that
 5 Levandowski “played an active role in the development of ‘**beam spacing**’ concepts for Uber
 6 LiDAR,” but no communications containing a single specific diode position or angle of the GBr3
 7 [REDACTED]. (*Id.* at 20-21 (emphasis added).) In particular, Waymo makes much of an email
 8 reporting that Levandowski said [REDACTED] “[REDACTED]” (*Id.* at 21.) But even
 9 if the concept of a beam spacing that “[REDACTED]” were a Waymo trade
 10 secret, Waymo chose not to assert it:

11 MR. JAFFE: [I]nstead, we see that they [Uber] adopt Waymo’s
 12 approach, which if you remember Mr. Droz, who is not an expert – he is a Waymo engineering [sic] – he explained this approach
 13 where Waymo figured out [REDACTED]
 14 [REDACTED]
 15

THE COURT: Was that designated as a trade secret?

MR. JAFFE: That idea, yes, it was.

THE COURT: In this case? You designated that in your 2019?

MR. JAFFE: That is the general idea of [REDACTED]
 that I’m paraphrasing right now and that is a trade secret on our
 19 trade secret list.

THE COURT: Which number? Is that being asserted in this trial?

MR. JAFFE: No, it’s not, Your Honor.

(9/6/17 Sealed Hr’g Tr. at 49:23-50:16.) Waymo accuses Uber of “adopt[ing] Waymo’s approach” as described by the May 17 Droz Declaration, which Dr. Hesselink refers to as “the [REDACTED] for [Waymo’s] new version of a 64-beam GBr.” (*See id.*, Dkt. 453-3 at 2-3 (Droz description); Dkt. 1456-3 at 3.) But Waymo made the strategic decision to assert TS 96, and not others. Waymo has asserted the specific implementation of its GBr3 [REDACTED], and it

1 should not be allowed to assert general diode positioning or beam spacing concepts not disclosed
 2 in TS 96.

3 **B. TS 96 Should Be Stricken**

4 **1. TS 96 is not a properly identified trade secret**

5 Waymo's position that TS 96 covers "Waymo's [REDACTED]" or strategy confirms that
 6 TS 96 is not properly delineated. Waymo has contended that "TS 96 claims one specific PCB
 7 board that includes [REDACTED]." (Waymo Resp. to
 8 Suppl. Br., Dkt. 1449-4 at 4.) But for its misappropriation theory, Waymo is focusing on its
 9 general beam spacing design, arguing that "its [REDACTED] design included in TS 96 is unique
 10 and different from Uber's prior designs and those known in the industry" and "the [REDACTED]
 11 strategy embodied in TS 96" includes [REDACTED]

12 [REDACTED] (*Id.* at 5.) At the September 6 hearing, Waymo
 13 admitted to the Court that the "[REDACTED]" is a *different* trade
 14 secret that is not being asserted at trial. (9/6/17 Sealed Hr'g Tr. at 49:10-50:16.).

15 Trade secret plaintiffs must "describe the subject matter of the trade secret with *sufficient*
 16 *particularity* to separate it from matters of general knowledge in the trade or of special knowledge
 17 of those persons . . . skilled in the trade." *Imax Corp. v. Cinema Techs., Inc.*, 152 F.3d 1161,
 18 1164-1165 (9th Cir. 1998) (citation omitted; emphasis in original); *see also Princess Cruises, Inc.*
 19 *v. Amrigon Enters., Inc.*, 51 F. App'x. 626, 628 (9th Cir. 2002) (granting summary judgment on
 20 trade secret counterclaim where plaintiff's "generalizations concerning its database components
 21 are insufficient to establish the necessary distinctions between its work and general knowledge in
 22 the trade.") Here, Waymo's Section 2019.210 statement for TS 96 contains no identification of a
 23 [REDACTED] strategy. Waymo argues that its identification of [REDACTED]
 24 [REDACTED] is sufficient disclosure of its [REDACTED] design." (Waymo Resp. to Suppl.
 25 Br., Dkt. 1449-4 at 4.) But in *Imax*, the Ninth Circuit rejected the plaintiff's "use of the catchall
 26 phrase 'including every dimension and tolerance that defines or reflects that design'" as
 27 insufficiently specific. *Imax*, 152 F.3d at 1167. For TS 96, Waymo likewise improperly uses
 28

1 catchall language. (*See* Dkt. 27-5 at 55 (“For example, these details include unique and unknown
 2 design characteristics such as the [REDACTED] . . .”).) If TS
 3 96 can be interpreted to mean both “[REDACTED]” and a general
 4 “[REDACTED],” it should be stricken for failure to identify the trade secret with
 5 sufficient particularity.

6 Moreover, as Uber has explained in its prior submissions, even limited to the specific
 7 parameters defined in the TS 96 files, TS 96 is still not a properly identified trade secret because
 8 it contains too many components and values without indicating which are purportedly trade
 9 secrets. TS 96 claims [REDACTED]
 10 [REDACTED] (Dkt. 25-7 at 55.) As the Court saw at the
 11 inspection, there are ten files in this specific folder with information for each of four layers of the
 12 board, including layouts of hundreds of components, the required manufacturer, and
 13 manufacturing tolerances. (8/23/17 Public Hr’g Tr. at 4:23-5:4, 18:6-17, 28:8-12, 30:13-23.) The
 14 schematics include the laser diode firing circuit that is claimed in Waymo’s asserted ’936 patent,
 15 which clearly cannot be a trade secret. (*Id.* at 25:17-26:22.) Waymo’s own Rule 30(b)(6) witness
 16 on TS 96 testified that the files cover a “very long” list of things that have nothing to do with
 17 diode positions (Chang Decl. Ex. 2, 8/3/17 Droz 30(b)(6) Dep. 288:19-290:22), and which
 18 Waymo does not allege that Uber copied.

19 Instead of identifying any specific features in the “very long” list of components and
 20 values that are included in the schematics, Waymo’s Section 2019.210 Statement expressly uses
 21 vague and non-limiting language to claim unspecified “unique and unknown design
 22 characteristics.” (Dkt. 25-7 at 55 (“For example, these details include unique and unknown
 23 design characteristics such as the [REDACTED] . . .”).) This
 24 is not “enough detail so that the defendant is able to learn the boundaries of the alleged trade
 25 secret in order to investigate defenses.” *VasoNova Inc. v. Grunwald*, No. C 12-02422 WHA,
 26 2012 WL 4119970, at *2 (N.D. Cal. Sept. 18, 2012). As drawn in Waymo’s Section 2019.210
 27 Statement, TS 96 should be stricken for vagueness.
 28

1 **2. The sufficiency of Waymo's TS 96 identification is a question for the**
 2 **Court, not the jury**

3 Waymo's argument that disputes over the identification of TS 96 are solely questions of
 4 fact for the jury ignores decisions to the contrary. (*See, e.g.*, Waymo Resp. to Suppl. Br., Dkt.
 5 1449-4 at 5-6, 8-9.) In *Agency Solutions*, the district judge explained that "a particularized
 6 description of an alleged trade secret is a **duty owed to the court**" such that the court can "reject a
 7 claim that information is a trade secret *sua sponte* if the information is not identified . . . with
 8 sufficient particularity to allow the court to determine what the information is." *Agency*
 9 *Solutions.Com, LLC v. Trizetto Grp., Inc.*, 819 F. Supp. 2d 1001, 1017 (E.D. Cal. 2011). In
 10 *Fortinet*, even after defendant "accepted [plaintiff's] trade secret disclosure for discovery
 11 purposes," the "primary question for the Court [was] whether the trade secret disclosure is
 12 sufficiently specific such that [defendant] can adequately defend itself." *Fortinet, Inc. v. Sophos,*
 13 *Inc.*, No. 13-cv-05831-EMC, 2015 WL 5971585, at *2 (N.D. Cal. Oct. 15, 2015). The *Fortinet*
 14 court conducted this assessment after the close of discovery, but three months before trial. *Id.* at
 15 *2-3; *see* Case Management & Pretrial Order for Jury, *Fortinet, Inc. v. Sophos, Inc.*, No. C 13-
 16 5831 EMC, (N.D. Cal. Dec. 16, 2014), Dkt. 110. Waymo's September 1 response relies on *Lilith*
 17 *Games*, but that case confirms that Section 2019.210 is not only about constraining discovery;
 18 rather, Section 2019.210 "enables defendants to form complete and well-reasoned defenses,
 19 ensuring that they need not wait until the eve of trial to effectively defend against charges of trade
 20 secret misappropriation." *Lilith Games (Shanghai) Co. v. uCool, Inc.*, No. 15-CV-01267-SC,
 21 2015 WL 4149066, at *4 (N.D. Cal. July 9, 2015).

22 Under the weight of the authority, whether Waymo identified TS 96 with sufficient
 23 particularity is a question for the Court. On the facts here, where Waymo is trying to shoehorn all
 24 manner of supposed trade secrets into the rubric of a specific folder of files, it is especially
 25 important that the Court exercise its authority and strike the claimed trade secret.

26 **C. Dr. Hesselink's Opinion on TS 96 Should Be Excluded**

27 Dr. Hesselink's opinion on TS 96 should be excluded under the Court's gate-keeping
 28 function, in order to avoid mischief and confusion of the jury. First, he disregards alternative

1 explanations for similarities between the two boards—i.e., that two different beam spacing
 2 patterns designed to illuminate points farther and farther down a road will have laser diodes
 3 positioned [REDACTED]. Second, his comparison of the GBr3 and Fuji curves is
 4 methodologically unsound. “[A]ny step that renders [an expert’s] analysis unreliable . . . renders
 5 the expert’s testimony inadmissible. That is true whether the step completely changes a reliable
 6 methodology or merely misapplies that methodology.” *Metabyte, Inc. v. Canal+Techs., S.A.*, No.
 7 C-02-05509 RMW, 2005 WL 6032845, at *2 (N.D. Cal. June 17, 2005) (granting motion to
 8 exclude testimony because expert’s “direct ratio” analysis for valuing equity was flawed and
 9 lacked external support). Waymo cannot meet its burden of demonstrating the admissibility of
 10 Dr. Hesselink’s TS 96 opinion, and any probative value of this opinion is outweighed by the
 11 danger of unfair prejudice and misleading the jury.¹

12 **1. Dr. Hesselink disregards the possibility that any similarity between**
13 **GBr3 and Fuji arises from general principles of optics**

14 Even if one were to accept Dr. Hesselink’s analysis that GBr3 and Fuji boards appear
 15 similar because the [REDACTED]
 16 [REDACTED] Dr. Hesselink disregards an alternative explanation for this alleged similarity –
 17 namely, that any beam spacing pattern designed to maintain an adequate vertical resolution in the
 18 far field vs. the near field will have beams (and therefore diodes) spaced more [REDACTED] for
 19 the far field than the near field.

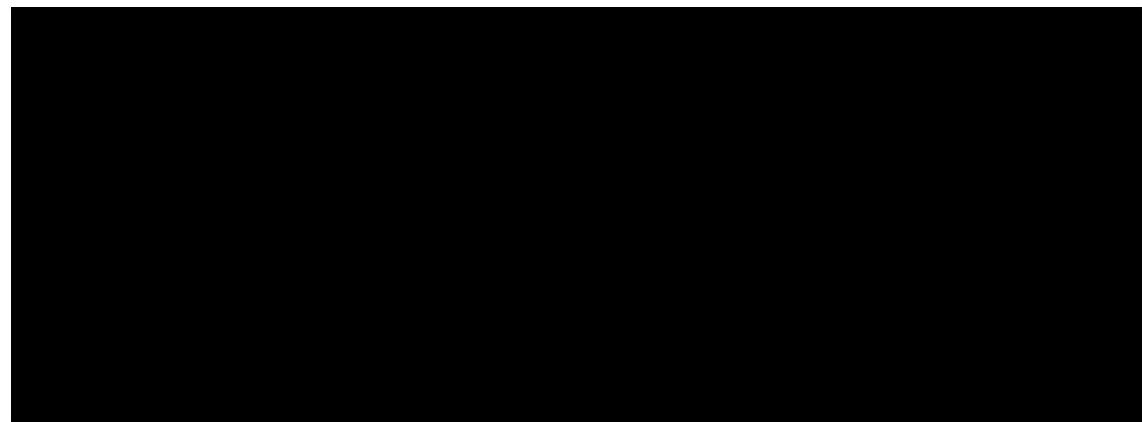
20 Dr. Hesselink agrees with Uber that the relationship between the beam angle and a point
 21 on a flat road is a simple trigonometric function:

22 Tangent(bean angle from horizontal) = sensor height / downrange
 23 distance.

24 ¹ Dr. Hesselink also fails to apply the Section 2019.210 statement’s definition of TS 96 as
 25 the specific implementation in the cited files. (Dkt. 25-7 at 55.) In his report, he does not cite
 26 evidence showing that Uber used the actual GBr3 transmit [REDACTED] schematics and layouts from
 27 the folder. He does not cite any evidence that Uber ever possessed these files or that any
 28 engineers at Uber made use of them to design Fuji. Furthermore, he admits that the laser diode
 positions and angles are “different reflecting a number of difference in design choices” (e.g.,
 height of LiDAR from ground, desired vertical resolution, downward tilt angle of cavity, and lens
 parameters). (Chang Decl. Ex. 1, Hesselink Rpt. ¶ 433.)

1 (See Uber Resp. to Court Questions, Dkt 337-3 at 2; Hesselink Decl., Dkt. 1456-3 at 30.) As a
 2 matter of trigonometry, the beam angles required for illuminating evenly-spaced points on a road
 3 farther and farther from the lens will progressively become [REDACTED] spaced. (See Uber Resp.
 4 to Court Questions, Dkt 337-3 at 2-3.) Likewise, the vertical spacing of the corresponding diodes
 5 for sampling points in the far field would become [REDACTED]. The
 6 Court has referred to this as Optics 101. (5/11/17 PI Order, Dkt. 426 at 17.)

7 Gbr3 and Fuji have different beam spacing designs (i.e., different elevation angles,
 8 different VFOVs), but they are both designed to have [REDACTED] for the far field (laser
 9 beams aimed more towards the horizon) than for the near field (laser beams aimed more
 10 downward). While they are not designed to have beams landing at evenly-spaced points on the
 11 ground, the landing points will be [REDACTED] in the near field than in the far field, due to the
 12 trigonometry described above. This is also true for the pioneering Velodyne HDL-64, which has
 13 a [REDACTED] for the far field than the near field. The illustration on the left below
 14 depicts the HDL-64 beam spacing (in blue). As can be seen, the manner in which the beams
 15 interrogate the ground is similar to the GBr3 pattern (on the right in red), with beams hitting
 16 [REDACTED] in the near field and farther apart in the far field. As can be seen in the
 17 illustrations of the Fuji pattern earlier in this brief, Fuji also has that general ground pattern.



25 Dr. Hesselink failed to consider whether any similarity in the [REDACTED]
 26 spacing of diodes between GBr3 and Fuji simply reflects the similar goals of maintaining
 27 adequate vertical resolution in the far field embraced by Velodyne, Waymo, and Uber, which
 28 results in some general similarities in the beam patterns of all three LiDARs in accordance with

1 the general principles of optics. Although Dr. Hesselink purports to justify his conclusion that
 2 Fuji [REDACTED] is derived from GBr3 [REDACTED] based on such [REDACTED] spacing, he
 3 disregards this alternative explanation. This unsupported opinion should therefore be excluded.

4 **2. Dr. Hesselink's comparison of the GBr3 curve and the Fuji curve,
 5 rather than actual diode positions, is methodologically unsound**

6 Dr. Hesselink's comparison of the GBr3 curve and the Fuji curve, rather than the actual
 7 diode positions (which do not match), is methodologically unsound and should be kept away from
 8 the jury. As the Ninth Circuit has noted, courts must exercise their *Daubert* gatekeeper function
 9 because “[e]xpert evidence can be both powerful and quite misleading because of the difficulty in
 10 evaluating it.” *U.S. v. Rincon*, 28 F.3d 921, 925 (9th Cir. 1994). Here, Dr. Hesselink intends to
 11 rely on the overlay of a scaled Fuji curve and a GBr3 curve to opine that the “shape of the two
 12 curves are strikingly similar,” notwithstanding the different positions of the diodes even in the
 13 scaled overlay. (Dkt. 1357-3 at 24.)

14 This is a bogus comparison. TS 96 claims the specific “[REDACTED]” of GBr3
 15 [REDACTED], but Dr. Hesselink ignores the actual diode positions in the schematics in favor of
 16 imaginary curves drawn to fit the [REDACTED] of the diodes. Such curves are simply
 17 approximations of the Petzval curves of each transmit lens. Dr. Hesselink admits that the Petzval
 18 curve is defined by the focal length, refractive index (based on lens material), and lens shape of
 19 each lens. (Hesselink Decl. ¶ 12.) In both GBr3 and Fuji, [REDACTED]
 20 [REDACTED] (Chang Decl. Ex. 1, Hesselink Rpt. ¶ 387; Hesselink Decl. ¶ 14-
 21 15.) The difference in focal length necessarily means that the Petzval curvatures are different,
 22 which is one reason why the positioning of diodes are different (the other reason is that the beam
 23 angles to which the diode positioning corresponds are different). Dr. Hesselink’s analysis
 24 removes this difference by factoring out the focal length, ostensibly to compare the curves to see
 25 if one is a scaled version of the other. By comparing the curves with the focal lengths factored
 26 out, Dr. Hesselink is merely showing that Petzval curves of the same focal length will be the
 27 same. This artificial comparison of *curves* does not establish that the *diode positioning* is the
 28 same. It is undisputed that the laser diodes do not match even in these scaled curves.

1 For these reasons, Dr. Hesselink's overlay of scaled *curves*, rather than just diode
 2 positions, has no probative value. Allowing Dr. Hesselink to present his overlay of the curves
 3 would only mislead the jury into thinking the *curves* were copied from TS 96's claimed
 4 schematics, when it is the actual diode positions that are in dispute. Dr. Hesselink's comparison
 5 of the curves should be excluded from presentation to the jury.

6 **III. CONCLUSION**

7 Waymo can try to have it one way: assert a broadly-claimed trade secret that is harder to
 8 defend as a trade secret but for which it may be easier to show Uber's use. And it can try to have
 9 it the other way: assert a narrowly-drawn trade secret – such as to an exact specification – that
 10 may be easier to defend as a trade secret but for which it would be harder to show actual use. But
 11 Waymo can't have it both ways – assert that an exact specification constitutes its trade secret for
 12 purposes of defending its trade-secret status, yet claim that it can prove use of that trade secret
 13 merely if general concepts reflected in that specifications are utilized.

14 Having it both ways, however, is precisely what Waymo is attempting here. This Court
 15 expressed doubts about the validity of Waymo's original, broadly-worded [REDACTED] trade
 16 secret, TS 1. Waymo thus retreated to TS 96 and claimed that the exact diode placement in the
 17 TS 96 specification constituted its trade secret. Yet Waymo cannot maintain, with any credibility,
 18 that Uber utilizes the same diode placement as in TS 96. So now Waymo claims that Uber's
 19 diode placement generally reflects the concepts of its trade secret – which is the broad idea of TS
 20 1 from which Waymo fled. So long as this Court does not permit Waymo to assert two
 21 inconsistent trade secrets (one broad and one specific) at the same time, then the summary
 22 judgment issue here is easy. TS 96 claims a specific diode placement. Indisputably, Uber does
 23 not use that specific diode placement. Summary judgment must follow.

24 Furthermore, TS 96 is an improperly identified trade secret that should be stricken, and
 25 the Court should exercise its gatekeeper role to exclude Dr. Hesselink's opinions on TS 96.

26

27

28

1 Dated: September 11, 2017
2

MORRISON & FOERSTER LLP

3
4 By: /s/ Michael A. Jacobs
MICHAEL A. JACOBS

5 Attorneys for Defendants
6 UBER TECHNOLOGIES, INC.
and OTTOMOTTO LLC

7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28